

User Manual of Precision AC- DC Power Supply: 0-103VDC, 0-10A



Features

- Outputs: 0~103V 10Ah regulating.
- Overload protection

Specification

Main Power Supply: $110 \pm 10\%$, 50/60Hz ± 2 Hz

Output Voltage 0 – 103 regulating

Output Current 0 – 10A regulating

Voltage

Line regulation: CV 0.2%+20mV; CC 1%+100mA

Load regulation: CV 0.2%+20mV, CC 1%+100mA

PARD: 0.3%+30mV (rms)

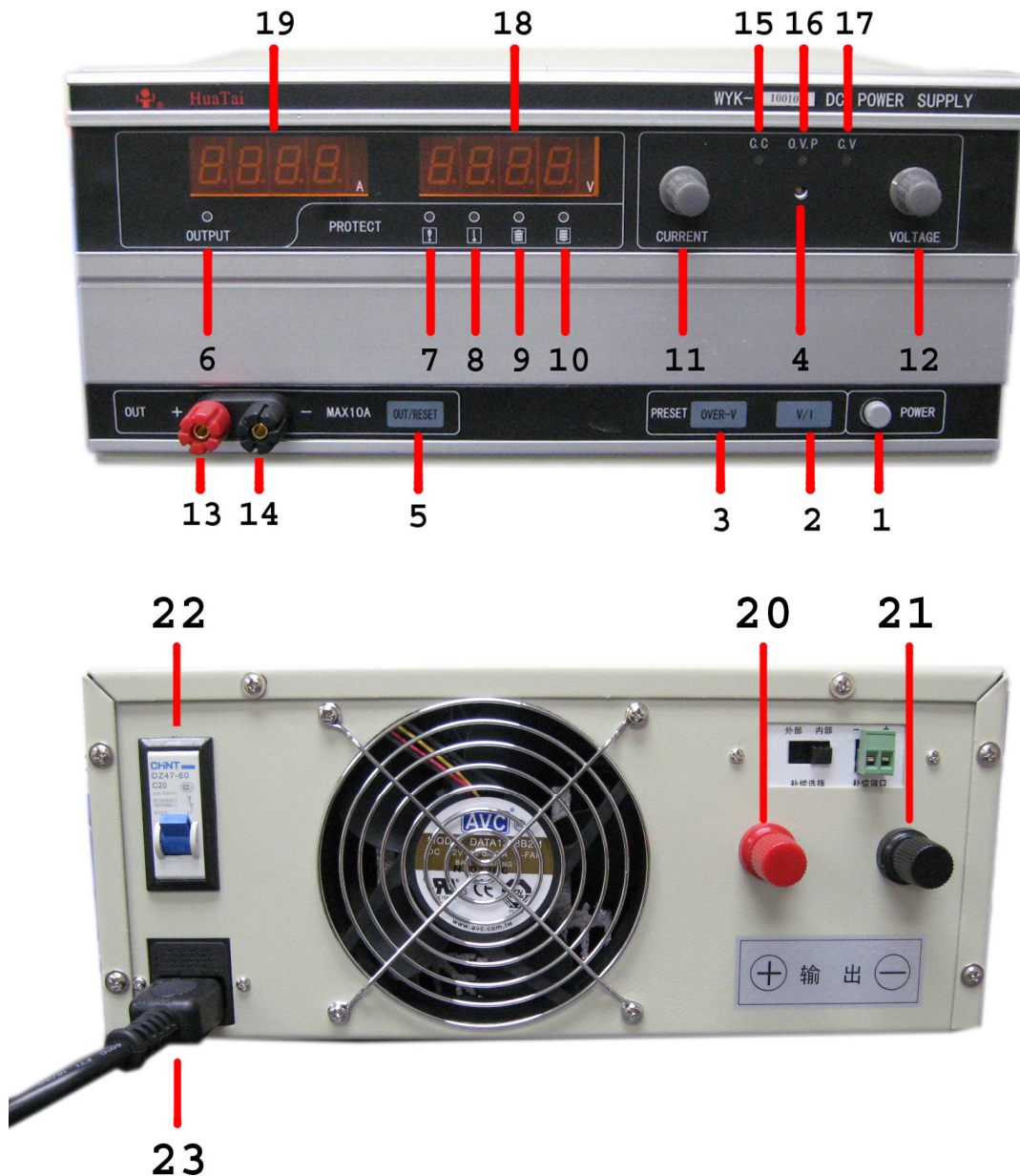
Constant Current Operation

Output current range: 0A~rating current continuously adjustable

Constant Voltage out put mode (CV): The out put voltage can be adjusted to any V from 0 to whatever voltage under 103.

Constant Current out put mode (CC): The out put current can be adjusted to any amp from 0 to 10A.

This charger can either working at CV mode, or CC mode, which can be switch automatically. Such as, if you try to charge 37V Li-ion battery pack, you will set the output voltage to 42V. Initially, this charger will work at CC mode, when the battery's voltage reach 98.7% out of 42V, this charger will switch from CC mode to CV mode. After a while, when the current drop to like 0.1A-0.2A, that means the battery is fully charged. Under constant voltage working condition, the output voltage is continuously adjustable. At the mean time, the output current is depend on the internal resistance from loading and agree to Ohm's Law. Under constant current working condition, the output current is continuously adjustable. At the mean time, the output voltage is depend on the internal resistance from loading and agree to Ohm's Law.



Front panel (the first picture)

1, Power switch

2, Voltage/Current preset/display button. When you hold down this button, it will show the preset voltage or current.

3, Over voltage preset/display button. When you hold down this button, it will show the over voltage point. If you want to adjust over voltage, you could hold down this button then adjust the over voltage knob.

4, Over voltage knob.

- 5, Output reset switch. It will change the output status when press this switch. Such as the output is on, it will become off after press this switch. It can also reset the protection lock.
- 6, Output indicator.
- 7, Short circuit indicator.
- 8, Over heat indicator.
- 9, Over voltage indicator.
- 10, low voltage indicator.
- 11, Current adjustor.
- 12, Voltage adjustor.
- 13, Positive auxiliary out put.
- 14, Negative auxiliary out put.
- 15, Constant current status indicator. If it lights up, that means it is working at constant current. If it is blinking, it is displaying the preset current.
- 16, Over voltage indicator.
- 17, Constant voltage status indicator. If it lights up, that means it is working at constant voltage. If it is blinking, it is displaying the preset voltage.
- 18, Voltage meter.
- 19, Current meter.
- 20, Positive out put.
- 21, Negative out put.
- 22, Air switch.
- 23, Input socket.

Operate

- 1, Turn on device, there is no out put at this point.
- 2, Hold down “over voltage preset/display button”, adjust the out put voltage and current to appropriate point.
- 3, If you need to set the over voltage protection, please hold down the “over voltage preset/display button”, use a screwdriver to adjust the over voltage adjustor.
- 4, Press “output reset switch”, the indicator will light up and device will have output.

Safety

- 1, Do not open this device when it is working.
- 2, Organize all the cables, never step on it.
- 3, MUST make sure that the ground cable is connected.
- 4, Check all the cables in a period of time, make sure there.





